MODIS IOT Weekly Report
Mission Operations Days: 1999/352 to 1999/359
December 18, 1999 13:57:39 EST to December 25, 1999 14:59:59 EST

Terra Spacecraft and MODIS Instrument Status:

Terra (AM-1) is in Earth-pointing Safe Mode
Terra (AM-1) has an anomaly with SCC1
MODIS is in Survival Mode
MODIS has no known Anomalies

Blackbody		Off	Nominal
Calibration Electronics		Off	Nominal
Control Processor		B On; A off	Nominal
Door:	Nadir	Latched, closed	Nominal
	Space View	Latched, closed	Nominal
	Solar Diffuser	Latched, closed	Nominal
FDDI Formatter		Off	Nominal
FIFO Memory		Off	Nominal
Format Processor		Off	Nominal
PC FPA		Off	Nominal
Power Supply:	1	Off	Nominal
	2	Off	Nominal
PV FPAs:	VIS	Off	Nominal
	NIR	Off	Nominal
	SMIR	Off	Nominal
	LWIR	Off	Nominal
Radiative Cooler:			
	Outgas Heaters	Off	Nominal
	LWIR FPA Heater	Off	Nominal
	SMIR FPA Heater	Off	Nominal
Scan Assembly		Off	Nominal
SDSM		Off	Nominal
SRCA		Off	Nominal
Survival Heaters:	PS1	Enabled	Nominal
	PS2	Enabled	Nominal

Flight Software	Rev BD	Nominal
Inhibit Ids Set	None	Nominal
TMONs enabled	None	Nominal

This Week's Completed MODIS Activities:

1999/352: EPS Enabled MODIS Power Feeds
1999/352: Enabled Survival Heaters

This Week's Scheduled MODIS Activities Not Completed:

None

Upcoming MODIS Events:

01/03/2000: MODIS Turn on and transition to Standby Mode
01/03/2000: Unlatch Space View Door, move to Outgas position
01/03/2000: Turn on Outgas heaters

01/04/2000: Unlatch the Solar Diffuser Door
01/04/2000: Unlatch the Nadir Aperture Door

MODIS Anomalies:

None

General Instrument Comments:

MODIS is in a nominal Survival Mode and is a bit colder than expected with temperatures in the range of -9 to -20 degrees Celsius. The MEM survival heater is activating regularly with an approximate duty cycle of 75%. Due to these colder temperatures, next week's scheduled turn on activities have been changed from using the primary side electronics to using the redundant side.

MODIS Telemetry Trends:

The optical bench bulkhead temperature is experiencing oscillations based on the spacecraft day to night cycle. The two main electronics module temperatures as well as the FAM and KM1 temperatures are varying with the MEM survival heater cycle. The remaining three temperature sensors have reached steady-state values.

Non-MODIS Significant Events:

EOS-AM1 launched from Vandenberg Air Force Base on December 18th at 18:57:39 GMT. On launch day, 1999/352, a small glitch during the solar array deployment required the use of a redundant system to successfully deploy the array. On 1999/334 (December 20th) an anomaly, believed to be caused by a single event upset, occurred with the high gain antenna. Commanding was restored via the Omni antenna a short while later and the high gain returned to service on ops day 1999/335. The following day, the

spacecraft computer put Terra into an earth-pointing safe mode and also commanded all of the instruments into safe modes. After downlinking the flight software code, it is believed that an error occurred in the TONS navigation portion of the software. At this time, the spacecraft is still in safe hold and a recovery process is scheduled to begin on December 27th.

MISR has successfully powered on and unlatched its cover. The CPHTS was turned on earlier in the mission than expected to help maintain MOPITT's temperatures at a nominal level. CERES successfully turned on both of its instruments. ASTER remains in survival mode.

Limited Life Item Status:

This summary will be deferred until next weeks report.